

WHAT IS CLAIMED IS:

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1. A wireless mouse unit comprising:
a wireless mouse generating signals for
moving a cursor across a display screen;
a rechargeable secondary battery cell
10 included in the wireless mouse; and
a receiver for receiving the signals
transmitted from the wireless mouse, the receiver
electrically connected to and powered by a computer
via a cable,

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the receiver including charging terminals
for recharging the rechargeable secondary battery
cell of the wireless mouse.

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2. The wireless mouse unit as claimed in
claim 1, wherein the receiver includes a wireless
mouse cradle shaped to accommodate the wireless
25 mouse when the wireless mouse is set thereat when
the wireless mouse is not in use, the charging
terminals disposed so as to contact charging
terminals provided on the wireless mouse when the
wireless mouse is set at the wireless mouse cradle
30 so as to allow recharging of the rechargeable
secondary battery cell.

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3. The wireless mouse unit as claimed in
claim 1, further comprising a connector cable having

at one end thereof a USB connector for connecting to a USB connector located on the computer and a second connector at another end thereof, wherein:

the receiver further comprises a connector
5 for connecting to the second connector of the connector cable;

the wireless mouse further comprises:
a wireless mouse connector for
connecting to the second connector of the
10 connector cable; and

a USB microcontroller unit powered by power supplied from the computer via the wireless mouse connector; and

a battery charger for recharging the
15 rechargeable secondary battery cell of the wireless mouse using electric power supplied from the computer via the cable when the wireless mouse is not in use, the battery charger being powered by power supplied from
20 the computer via the wireless mouse connector.

25 4. The wireless mouse unit as claimed in claim 1, further comprising:

a connector cable having at one end thereof a USB connector for connecting to a USB connector located on the computer and a second connector at
30 another end thereof; and

a USB-PS/2 conversion connector having a USB connector at one end thereof and a PS/2 connector at another end thereof,

the receiver further comprising:
35 a receiver connector for connecting to the second connector; and

a USB microcontroller unit that outputs a

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PS/2 mode signal when the USB connector at one end of the connector cable is connected to the computer via the USB-PS/2 converter connector.

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10 5. The wireless mouse unit as claimed in claim 4, wherein the wireless mouse further comprises:

a wireless mouse connector for connecting to the second connector of the connector cable;

15 a USB microcontroller unit powered by power supplied from the computer via the wireless mouse connector and that switches to PS/2 mode when the USB connector at one end of the connector cable is connected to the computer via the USB-PS/2 converter connector; and

20 a battery charger for charging the rechargeable secondary battery cell of the wireless mouse using electric power supplied from the computer via the cable when the wireless mouse is not in use, the battery charger being powered by power supplied from the computer via the wireless
25 mouse connector.

30 6. A wireless mouse that transmits wireless signals to a receiver connected to a computer so as to move a cursor through a display screen of the computer, the wireless mouse comprising:

35 a rechargeable secondary battery cell; and charging terminals that connect to charging terminals disposed on the receiver when the wireless

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mouse is set on the receiver, such that when so set the rechargeable secondary battery cell is charged using electric power supplied from the computer.

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7. The wireless mouse as claimed in claim 6, wherein a solar battery cell is provided on an upper surface of a body of the wireless mouse, the solar battery cell being electrically connected in parallel with the rechargeable secondary battery cell.

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8. The wireless mouse as claimed in claim 6, further comprising:

20 an optical sensor unit having a light emitting element and an optical sensor chip for sensing light emitted from the light emitting element and reflected from a working surface on which the wireless mouse is set during operation;
25 and

a built-in solar battery cell that captures a portion of the light emitted from the light emitting element,

30 the solar battery cell and the rechargeable secondary battery cell being electrically connected in parallel.

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9. A wireless mouse that transmits wireless signals to a receiver connected to a

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computer so as to move a cursor through a display screen of the computer, the wireless mouse comprising:

5 a connector connected to a connector at one end of a cable extending from the computer, the cable being connected to a USB female connector on the computer; and

10 a USB microcontroller unit powered by electric power from the connector.

10. The wireless mouse as claimed in claim 15 9, that transmits wireless signals to a receiver connected to a computer so as to move a cursor through a display screen of the computer, the wireless mouse further comprising a rechargeable secondary battery cell such, power from the computer 20 being used to charge the rechargeable secondary battery cell when the wireless mouse is connected to the connector at one end of the cable but not used.

25 11. A receiver connected to a computer and that receives wireless signals transmitted from a wireless mouse so as to move a cursor through a display screen of the computer, the receiver 30 comprising:

wireless mouse cradle shaped to accommodate the wireless mouse when the wireless mouse is set thereat when the wireless mouse is not in use, 35 charging terminals of the wireless mouse cradle disposed so as to contact charging terminals provided on the wireless mouse when the wireless

Sub A1 → mouse is set at the wireless mouse cradle so as to allow charging of the rechargeable secondary battery cell.

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12. The receiver as claimed in claim 11, having a connector connected to the connector at the end of the cable extending from the computer and connected to the computer USB connector.

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11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100